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APPLICATION NO.	FIL	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,374	10/698,374 11/03/2003		Kia Silverbrook	YU190US	1139
24011	7590	06/29/2005	EXAMINER		
SILVERBE 393 DARLII		SEARCH PTY LT	STEPHENS, JUANITA DIONNE		
BALMAIN,	2041	1	ART UNIT	PAPER NUMBER	
AUSTRALI	1			2853	

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)
055 4-45-	0	10/698,374	SILVERBROOK, KIA
Οπίσε Αστίσ	on Summary	Examiner	Art Unit
		Juanita D. Stephens	2853
The MAILING DA Period for Reply	TE of this communication ap	pears on the cover sheet with the	correspondence address
THE MAILING DATE O  - Extensions of time may be ava after SIX (6) MONTHS from the - If the period for reply specified - If NO period for reply is specifie - Failure to reply within the set or	F THIS COMMUNICATION. itable under the provisions of 37 CFR 1. e mailing date of this communication. above is less than thirty (30) days, a reped above, the maximum statutory period rextended period for reply will, by statut e later than three months after the mailir	Y IS SET TO EXPIRE 3 MONTH 136(a). In no event, however, may a reply be t by within the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDON and date of this communication, even if timely file	imely filed  ays will be considered timely.  m the mailing date of this communication.  ED (35 U.S.C. § 133).
Status			
2a) ☐ This action is FIN  3) ☐ Since this applica	tion is in condition for allowa	endment filed 4/5/2005. s action is non-final. Ince except for formal matters, pl Ex parte Quayle, 1935 C.D. 11, 4	
Disposition of Claims			
4a) Of the above of 5) ☐ Claim(s) is 6) ☒ Claim(s) <u>1-7,9-11</u> 7) ☒ Claim(s) <u>8 and 12</u>	and 16 is/are rejected.	wn from consideration.	
Application Papers			
10) The drawing(s) file Applicant may not r Replacement drawi	equest that any objection to the ng sheet(s) including the correc	er. are: a)⊠ accepted or b)⊡ object drawing(s) be held in abeyance. So ction is required if the drawing(s) is o xaminer. Note the attached Offic	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. §	119		
12) Acknowledgment is a) All b) Some 1. Certified co 2. Certified co 3. Copies of the application	is made of a claim for foreign  * c) None of:  pies of the priority documen  pies of the priority documen  ne certified copies of the prior  from the International Burea	ts have been received in Applica prity documents have been receiv	tion No. <u>10/160,273</u> . ved in this National Stage
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Attachment(s)  1) Notice of References Cited	(PTO 802)	4) T Indicated 6	ov (DTO 442)
2) Notice of Draftsperson's Par	ent Drawing Review (PTO-948) ement(s) (PTO-1449 or PTO/SB/08	4) Interview Summar Paper No(s)/Mail [ 5) Notice of Informal 6) Other:	

#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-7 and 9-11 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kashino et al. (US 6,007,187).

Kashino discloses a nozzle arranged for an inkjet printhead (as seen in Figs. 1 and 2), the nozzle arrangement including: 1) a nozzle chamber (located above heat generating element 2) for holding ink, 2) an actuator (heat generating element 2/moveable member 6) in fluid communication with the nozzle chamber, the actuator being movable with respect to the nozzle chamber upon actuation, 3) a fluid ejection port (11) in fluid communication with the nozzle chamber for allowing ejection of ink upon movement of an operative portion of the actuator relative to the nozzle chamber during actuation, the fluid ejection port defining an ejection axis generally perpendicular to a plane within which the fluid ejection port is disposed (col 11, lns 14-22; lns 39-46r), 4) an inlet channel (liquid flow path 3b) in fluid communication with the nozzle chamber for supplying ink thereto from an ink supply (col 10, lns 38-41), 5) wherein the inlet channel is positioned for supplying ink to refill the nozzle chamber at a position radially displaced from the ejection axis (as seen in Figs. 1 and 2), 6) wherein the inlet channel (3b) is orientated such that the ink enters the nozzle chamber along an inlet axis that is

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substantially parallel to, but displaced from the ejection axis (as seen in Figs. 1 and 2), 7) wherein the fluid ejection port (11) is formed in a roof portion (orifice plate 14) that at least partially defines the nozzle chamber, the nozzle arrangement being configured such that, upon actuation, an operative portion of the actuator is moved relative to the fluid ejection port, thereby causing the ink to be ejected from the fluid ejection port (col 11, Ins 14-22, Ins 39-46), 8) at least part of the operative portion of the actuator defines a roof portion (14) that at least partially defines the nozzle chamber and the fluid ejection port is formed in the roof portion, wherein the nozzle arrangement is configured such that, upon actuation, the roof portion, and thereby the fluid ejection port, are moved relative to the nozzle chamber, thereby causing the ink to be ejected (50) from the fluid ejection port (col 11, Ins 14-22, Ins 39-46), 9) upon return of the actuator to a quiescent position after actuation the ejection of the ink through the fluid ejection port (11), the nozzle chamber refilled with ink via the inlet channel (3b) (col 12, lns 11-23), 10) wherein the nozzle chamber is refilled with ink from the inlet channel due to a reduction in pressure within the nozzle chamber caused by surface tension of a concave ink meniscus across the fluid ejection port after ink ejection (col 12, lns 11-23), 11) wherein the actuator is a thermal actuator (heat generating element 2), 12) wherein the actuator is moveable within a plane upon actuation, the plane intersecting and being parallel with the ejection axis (as seen in Figs. 1 and 2), 13) wherein the actuator is mounted to flex about an anchor point (5b) upon actuation (col 10, lns 52-53), 14) wherein the inlet channel (3b) is located in a plane that is parallel to both the inlet channel axis and the ejection axis and which intersects both axes (as seen in Figs. 1

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and 2), and 15) wherein the actuator (2/6) is rotatably moved about a pivot region (fulcrum 6b) upon actuation and the inlet channel is disposed closer to the pivot region than to the ejection port (as seen in Figs. 1 and 2).

### Allowable Subject Matter

3. Claims 8 and 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 13-15 will after claim 12 has been rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Response to Arguments

4. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

#### **Contact Information**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juanita D. Stephens whose telephone number is (571) 272-2153. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JS

June 27, 2005

Juanita D. Stephens Primary Examiner Art Unit 2853